



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200
Fax 613 632-5246

Purchasing Receipts

| PO No | Supplier | Line Item No | Rel No | Terms | Purchased Item | Description | For Part No | Project | Equipment ID | Order Qty | Due Date | Received Quantity | Accounting Job No | Container No | Status | Receive Date | Price/Unit | Aging Days | Past Due | Total | Supplier Name |
|----------|-----------|--------------|--------|---------------|----------------|--|-------------|---------|--------------|-----------|-----------|-------------------|-------------------|--------------|----------|--------------|----------------|------------|----------|----------|--------------------------|
| P0042203 | MCM001-VU | 1 | 1 | 12% 10 Net 30 | 5544T38 | Rod Ø20mm X 23-3/4 | | | | 12 | 1/11/2019 | 12 | | S144325 | Stock | 1/11/2019 | \$ 7.70 / ft | 0 | | \$92.44 | McMaster-Carr Supply Co. |
| | | 2 | | | 59915K274 | Rod End Bearing D4777-1 | | | | 15 | | 15 | | S143965 | Inactive | 1/10/2019 | \$ 19.05 / pcs | 1 | | \$285.75 | McMaster-Carr Supply Co. |
| | | 3 | | | SWAGA-2000 | 1/8" Female Spade Connector | | | | 300 | | 300 | | S144273 | Stock | 1/11/2019 | \$ 0.07 / Ea | 0 | | \$20.28 | McMaster-Carr Supply Co. |
| | | 4 | | | 6628K23 | 1144 Carbon Steel Rod, Ultra Strength, 1/4" Dia. | | | | 12 | | 12 | | S144326 | Stock | 1/11/2019 | \$ 1.28 / ft | 0 | | \$15.38 | McMaster-Carr Supply Co. |
| | | 5 | | | 8297T169 | Small O-Ring, Dash # 110 | | | | 10 | | 10 | | S144270 | Stock | 1/11/2019 | \$ 0.29 / Ea | 0 | | \$2.88 | McMaster-Carr Supply Co. |
| | | 6 | | | 8297T174 | Large O-Ring, Dash # 115 | | | | 10 | | 10 | | S144272 | Stock | 1/11/2019 | \$ 0.38 / Ea | 0 | | \$3.75 | McMaster-Carr Supply Co. |
| | | 7 | | | 8893K178 | Ø3/16 O1 Tool Steel Rod | | | | 6 | | 6 | | S144327 | Stock | 1/11/2019 | \$ 1.30 / ft | 0 | | \$7.81 | McMaster-Carr Supply Co. |
| | | 8 | | | 8908K62 | Shaft | | | | 100 | | 100 | | S144277 | Stock | 1/11/2019 | \$ 0.14 / ft | 0 | | \$14.25 | McMaster-Carr Supply Co. |
| | | 9 | | | 90577A165 | Coupling Nut | | | | 10 | | 10 | | S144281 | Stock | 1/11/2019 | \$ 3.00 / Ea | 0 | | \$30.00 | McMaster-Carr Supply Co. |
| | | 10 | | | 91595A446 | Dowel Pin | | | | 25 | | 25 | | S144283 | Stock | 1/11/2019 | \$ 0.36 / Ea | 0 | | \$8.94 | McMaster-Carr Supply Co. |
| | | 11 | | | 91611A213 | Slotted Spring Pin, Ø4.4mm X 30mm | | | | 100 | | 100 | | S144284 | Stock | 1/11/2019 | \$ 0.08 / Ea | 0 | | \$7.97 | McMaster-Carr Supply Co. |
| | | 12 | | | 91611A216 | Slotted Spring Pin, Ø4.4mm X 36mm | | | | | | 100 | | S144288 | Stock | 1/11/2019 | \$ 0.09 / Ea | 0 | | \$8.69 | McMaster-Carr Supply Co. |

| PO No | Supplier | Line Item No | Rel No | Terms | Purchased Item | Description | For Part No | Equipment ID | Order Qty | Due Date | Received Quantity | Accounting Job No | Container No | Status | Receive Date | Price/Unit | Aging Past Days | Total | Supplier Name |
|-------|----------|--------------|--------|-------|---------------------------|--------------------------------------|-------------|--------------|-----------|----------|-------------------|-------------------|--------------|----------|--------------|---------------|-----------------|----------|--------------------------|
| | | 13 | | | 92620A875 | Cap Screw, 3/4-16 X 3 UNF 2A | | | 3 | | 3 | | S144289 | Stock | 1/11/2019 | \$ 9.24 / Ea | 0 | \$27.72 | McMaster-Carr Supply Co. |
| | | 14 | | | 97484A055 | Rivet, Ø3/32 X 1/4 | | | 250 | | 250 | | S144290 | Stock | 1/11/2019 | \$ 0.02 / Ea | 0 | \$5.00 | McMaster-Carr Supply Co. |
| | | 15 | | | 98025A031 | Oversized Washer, 3/8 I.D. | | | 50 | | 50 | | S144291 | Stock | 1/11/2019 | \$ 0.21 / Ea | 0 | \$10.70 | McMaster-Carr Supply Co. |
| | | 16 | | | MDELIRINB1.250X3.000W | M Delrin Bar, White receive ft | | | 4 | | 4 | | S144321 | Stock | 1/11/2019 | \$ 33.89 / ft | 0 | \$135.56 | McMaster-Carr Supply Co. |
| | | 17 | | | MDELIRINB1.500X3.000W | M Delrin Bar, White | | | | | 4 | | S144322 | Stock | 1/11/2019 | \$ 40.24 / ft | 0 | \$160.96 | McMaster-Carr Supply Co. |
| | | 18 | | | MT-NYLON 6-80.250X2.000-W | Nylon 6 White Bar 0.250" H x 2" Wide | | | 2 | | 2 | | S144320 | Stock | 1/11/2019 | \$ 39.85 / sf | 0 | \$79.70 | McMaster-Carr Supply Co. |
| | | 19 | | | 2458K14 | Ball Joint Rod End | | | 6 | | 6 | | S144188 | Inactive | 1/11/2019 | \$ 5.67 / Ea | 0 | \$34.02 | McMaster-Carr Supply Co. |
| | | 20 | | | 3799K13 | Rod End, M8 x 1.25 X 50mm | | | | | 6 | | S144292 | Stock | 1/11/2019 | \$ 9.62 / Ea | 0 | \$57.72 | McMaster-Carr Supply Co. |
| | | 21 | | | 5274T691 | Vial, Ø1.58 X .73 | | | 10 | | 10 | | S144293 | Stock | 1/11/2019 | \$ 0.70 / Ea | 0 | \$7.04 | McMaster-Carr Supply Co. |
| | | 22 | | | 60765K343 | Knob, M8 x 1.25 | | | | | 10 | | S144295 | Stock | 1/11/2019 | \$ 2.97 / Ea | 0 | \$29.70 | McMaster-Carr Supply Co. |
| | | 23 | | | 7813A47 | Hex L Key, 5mm | | | 6 | | 6 | | S144298 | Stock | 1/11/2019 | \$ 1.58 / Ea | 0 | \$9.48 | McMaster-Carr Supply Co. |
| | | 24 | | | 84835A24 | Spring Plunger, .25 Nose Dia | | | | | 6 | | S144300 | Stock | 1/11/2019 | \$ 2.82 / Ea | 0 | \$16.92 | McMaster-Carr Supply Co. |
| | | 25 | | | 91250A332 | Screw, M6 X 30mm SHCS | | | 50 | | 50 | | S144303 | Stock | 1/11/2019 | \$ 0.16 / Ea | 0 | \$8.24 | McMaster-Carr Supply Co. |

| PO No | Supplier | Line Item No | Rel No | Terms | Purchased Item | Description | For Part No | Project | Equipment ID | Order Qty | Due Date | Received Quantity | Accounting Job No | Container No | Status | Receive Date | Price/Unit | Aging Days | Past Due | Total | Supplier Name |
|--------|----------|--------------|--------|-------|----------------|--------------------------------|-------------|---------|--------------|-----------|----------|-------------------|-------------------|--------------|--------|--------------|--------------|------------|----------|------------|--------------------------|
| | | 26 | | | 91595A485 | Dowel Pin, 6mm X 60mm | | | | 10 | | 10 | 10 | S144304 | Stock | 1/11/2019 | \$ 0.86 / Ea | 0 | | \$8.60 | McMaster-Carr Supply Co. |
| | | 27 | | | 91595A567 | Dowel Pin, 8mm X 30mm | | | | | | 10 | | S144306 | Stock | 1/11/2019 | \$ 0.76 / Ea | 0 | | \$7.59 | McMaster-Carr Supply Co. |
| | | 28 | | | 91595A741 | Pin, Dowel, 12mm X 36mm | | | | | | 10 | | S144328 | Stock | 1/11/2019 | \$ 1.95 / Ea | 0 | | \$19.46 | McMaster-Carr Supply Co. |
| | | 29 | | | 91611A159 | Slotted Spring Pin Ø3mm X 20mm | | | | 200 | | 200 | | S144311 | Stock | 1/11/2019 | \$ 0.06 / Ea | 0 | | \$11.32 | McMaster-Carr Supply Co. |
| | | 30 | | | 92605A166 | Socket Head Set Screw | | | | 10 | | 10 | | S144312 | Stock | 1/11/2019 | \$ 1.03 / Ea | 0 | | \$10.28 | McMaster-Carr Supply Co. |
| | | 31 | | | 92981A215 | Bolt, Shoulder, 8mm X 60mm | | | | 100 | | 100 | | S144268 | Stock | 1/11/2019 | \$ 3.26 / Ea | 0 | | \$326.00 | McMaster-Carr Supply Co. |
| | | 32 | | | 94285A515 | Set Screw, M6 X 1 X 8 | | | | 50 | | 50 | | S144313 | Stock | 1/11/2019 | \$ 0.23 / Ea | 0 | | \$11.38 | McMaster-Carr Supply Co. |
| | | 33 | | | 98541A139 | Ring, Retaining | | | | 10 | | 10 | | S144319 | Stock | 1/11/2019 | \$ 0.79 / Ea | 0 | | \$7.85 | McMaster-Carr Supply Co. |
| Total: | | | | | | | | | | | | 1,507 | | | | | | | | \$1,483.38 | |



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO042203



Supplier: MCM001-VU
McMaster-Carr Supply Co,
P.O. Box 7690
Chicago, IL 60680-7690 USA
Phone: 330 995 5500
Fax: 330 995 9600

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO042203

PO Date: 1/8/19

Due Date: 1/11/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground

Pymt Terms: 2% 10 Net 30

Freight Terms:

Special Comments:

E-MAILED
JAN 08 2019

| Line Item | Job | Part | Supplier Part No | Description | Status | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (USD) | Extended Price |
|-----------|--------|------------|-----------------------------|---|--------|---------|----------|----------------|-------------------|---------|------------------|----------------|
| 1 | | 5544T38 | 5544T382 6FT | Rod Ø20mm X 23-3/4 | Firmed | - | 1/11/19 | 12 ft | 0 ft | 12 ft | \$7.703333/ft | \$92.44 |
| 2 | 188287 | 59915K274 | | Rod End Bearing D4777-1 | Firmed | - | 1/11/19 | 15 pcs | 0 pcs | 15 pcs | \$19.05/pcs | \$285.75 |
| 3 | | SWA6A-2000 | 69525K14 100 / per pk | 1/8" Female Spade Connector | Firmed | - | 1/11/19 | 300 Ea | 0 Ea | 300 Ea | \$0.0676/Ea | \$20.28 |
| 4 | | 6628K23 | 6 ft | 1144 Carbon Steel Rod, Ultra Strength, 1/4" Dia. | Firmed | - | 1/11/19 | 12 ft | 0 ft | 12 ft | \$1.2816666/ft | \$15.38 |
| 5 | | 8297T169 | 10/pk | Small O- Ring, Dash # 110 | Firmed | - | 1/11/19 | 10 Ea | 0 Ea | 10 Ea | \$0.288/Ea | \$2.88 |
| 6 | | 8297T174 | 10/pk | Large O- Ring, Dash # 115 | Firmed | - | 1/11/19 | 10 Ea | 0 Ea | 10 Ea | \$0.375/Ea | \$3.75 |
| 7 | | 8893K178 | 6 ft | Ø3/16 O1 Tool Steel Rod | Firmed | - | 1/11/19 | 6 ft | 0 ft | 6 ft | \$1.301666/ft | \$7.81 |
| 8 | | 8908K62 | 100/pk | Shaft | Firmed | - | 1/11/19 | 100 ft | 0 ft | 100 ft | \$0.1425/ft | \$14.25 |

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

P0042203



| Items | | | | | | | | | | | | |
|-----------|-----|-----------------------------|---------------------|------------------------------------|--------|---------|----------|----------------|-------------------|---------|------------------|----------------|
| Line Item | Job | Part | Supplier Part No | Description | Status | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (USD) | Extended Price |
| 9 | | 90977A165 ✓ | 10/pk | Coupling Nut | Firmed | - | 1/11/19 | 10 Ea | 0 Ea | 10 Ea | \$3.00/Ea | \$30.00 |
| 10 | | 91595A446 ✓ | 25/pk | Dowel Pin | Firmed | - | 1/11/19 | 25 Ea | 0 Ea | 25 Ea | \$0.3576/Ea | \$8.94 |
| 11 | | 91611A213 ✓ | 100/pk | Slotted Spring Pin, Ø4.4mm X 30mm | Firmed | - | 1/11/19 | 100 Ea | 0 Ea | 100 Ea | \$0.0797/Ea | \$7.97 |
| 12 | | 91611A216 ✓ | 100/pk | Slotted Spring Pin, Ø4.4mm X 36mm | Firmed | - | 1/11/19 | 100 Ea | 0 Ea | 100 Ea | \$0.0869/Ea | \$8.69 |
| 13 | | 92620A875 ✓ | 1/pk | Cap Screw, 3/4-16 X 3 UNF 2A | Firmed | - | 1/11/19 | 3 Ea | 0 Ea | 3 Ea | \$9.24/Ea | \$27.72 |
| 14 | | 97484A055 ✓ | 250/pk | Rivet, Ø3/32 X 1/4 | Firmed | - | 1/11/19 | 250 Ea | 0 Ea | 250 Ea | \$0.02/Ea | \$5.00 |
| 15 | | 98025A031 ✓ | 50/pk | Oversized Washer, 3/8 I.D. | Firmed | - | 1/11/19 | 50 Ea | 0 Ea | 50 Ea | \$0.214/Ea | \$10.70 |
| 16 | | MDELINB1.250X3.000W ✓ | 8739K61 4 FT | M Delrin Bar, White receive ft | Firmed | - | 1/11/19 | 4 ft | 0 ft | 4 ft | \$33.89/ft | \$135.56 |
| 17 | | MDELINB1.500X3.000W ✓ | 8739K67 4 FT | M Delrin Bar, White | Firmed | - | 1/11/19 | 4 ft | 0 ft | 4 ft | \$40.24/ft | \$160.96 |
| 18 | | MT-NYLON 6-B0.250X2.000-W ✓ | 8539K95 1/pc = 2 sf | Nylon 6 White Bar 0.250"H x 2"Wide | Firmed | - | 1/11/19 | 2 sf | 0 sf | 2 sf | \$39.85/sf | \$79.70 |
| 19 | | 2458K14 ✓ | 1/pk | Ball Joint Rod End | Firmed | - | 1/11/19 | 6 Ea | 0 Ea | 6 Ea | \$5.67/Ea | \$34.02 |
| 20 | | 3799K13 ✓ | 1/pk | Rod End, M8 x 1.25 X 50mm | Firmed | - | 1/11/19 | 6 Ea | 0 Ea | 6 Ea | \$9.62/Ea | \$57.72 |
| 21 | | 5274T691 ✓ | 10/pk | Vial, Ø1.58 X .73 | Firmed | - | 1/11/19 | 10 Ea | 0 Ea | 10 Ea | \$0.704/Ea | \$7.04 |
| 22 | | 60765K343 ✓ | 10/pk | Knob, M8 x 1.25 | Firmed | - | 1/11/19 | 10 Ea | 0 Ea | 10 Ea | \$2.97/Ea | \$29.70 |

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PURCHASE ORDER PO042203



Items

| Line Item | Job | Part | Supplier Part No | Description | Status | Account | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (USD) | Extended Price |
|-----------|-----|-------------|------------------|--------------------------------|--------|---------|----------|----------------|---------------------|---------|------------------|----------------|
| 23 | | 7813A47 ✓ | 1/pk | Hex L Key, 5mm | Firmed | - | 1/11/19 | 6 Ea 6X | 0 Ea JAN 11 2019 | 6 Ea | \$1.58/Ea | \$9.48 |
| 24 | | 84835A24 ✓ | 1/pk | Spring Plunger, .25 Nose Dia. | Firmed | - | 1/11/19 | 6 Ea 6X | 0 Ea JAN 11 2019 | 6 Ea | \$2.82/Ea | \$16.92 |
| 25 | | 91290A332 ✓ | 50/pk | Screw, M6 X 30mm SHCS | Firmed | - | 1/11/19 | 50 Ea 50X | 0 Ea JAN 11 2019 | 50 Ea | \$0.1648/Ea | \$8.24 |
| 26 | | 91595A485 ✓ | 10/pk | Dowel Pin, 6mm X 60mm | Firmed | - | 1/11/19 | 10 Ea 10X | 0 Ea JAN 11 2019 | 10 Ea | \$0.86/Ea | \$8.60 |
| 27 | | 91595A567 ✓ | 10/pk | Dowel Pin, 8mm X 30mm | Firmed | - | 1/11/19 | 10 Ea 10X | 0 Ea JAN 11 2019 | 10 Ea | \$0.759/Ea | \$7.59 |
| 28 | | 91595A741 ✓ | 5/pk | Pin, Dowel, 12mm X 36mm | Firmed | - | 1/11/19 | 10 Ea 10X | 0 Ea JAN 11 2019 | 10 Ea | \$1.946/Ea | \$19.46 |
| 29 | | 91611A159 ✓ | 200/pk | Slotted Spring Pin Ø3mm X 20mm | Firmed | - | 1/11/19 | 200 Ea 200X | 0 Ea JAN 11 2019 | 200 Ea | \$0.0566/Ea | \$11.32 |
| 30 | | 92605A166 ✓ | 5/pk | Socket Head Set Screw | Firmed | - | 1/11/19 | 10 Ea 10X | 0 Ea JAN 11 2019 | 10 Ea | \$1.028/Ea | \$10.28 |
| 31 | | 92981A215 ✓ | 5/pk | Bolt, Shoulder, 8mm X 60mm | Firmed | - | 1/11/19 | 100 Ea 100X | 0 Ea JAN 11 2019 | 100 Ea | \$3.26/Ea | \$326.00 |
| 32 | | 94285A515 ✓ | 50/pk | Set Screw, M6 X 1 X 8 | Firmed | - | 1/11/19 | 50 Ea 50X | 0 Ea JAN 11 2019 | 50 Ea | \$0.2276/Ea | \$11.38 |
| 33 | | 98541A139 ✓ | 10/pk | Ring, Retaining | Firmed | - | 1/11/19 | 10 Ea 10X | 0 Ea JAN 11 2019 | 10 Ea | \$0.785/Ea | \$7.85 |

Grand Total: \$1,483.38

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1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042203



Order Notes

Procurement Quality Clauses
A005 RIGHT OF ENTRY
A016 PERSONNEL QUALIFICATION
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A032 DOCUMENT SPECIAL REQUIREMENTS
A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS
A040 NOTIFICATION OF QUALITY ESCAPE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 1/8/19 11:53 AM dart.lavoie.chantal

Chantal Lavoie

From:

Sent:

To:

Subject:

Michelle GagnonDonovan
Wednesday, January 02, 2019 11:06 AM
Chantal Lavoie; David Duval; Diane Baker; Jennifer Renwick; Jonathan Duval; Kim Johnston; Linda Lacelle; Lisa McMachen; Shannon Hadley; Sian Willems; Simon Langlois; Sylvie Larocque; Wesley Reid
New Parts week 51

Hello All,

Please see below for the list of parts added to Plex week 51.

Thank you,

Michelle

New Parts manually added to Plex this week:

RBE105-14101W13P/-PO
RBE117-15004W6-1/-3/-5/-7/-9/-11/-13/-15/-17/-19/-21
DALL-50-C-B-A-1P
4.5NR-30
RBEA62316-1/-3/-5/-7/-9/-11/-13/-15/-17/-19/-31/-47/-49/-51/-53/-55
RBEVR-L11-0010-004-B-1/-3
RBEVR-L11-0010-002-B-1/-3/-5/-7
RBEVR-L11-0010-002-D-1/-3
RBEL133M6705-101-01/-03
RBE1X25-166-856-1/-3/-5/-7
RBE1X25-166-857-1/-3
RBE1X36-166-807-1/-3/-5
RBE1X46-175-575-1/-3/-5
RBE1X56-136-858

Hardware/Material parts manually added to Plex this week:

~~2458K14~~
~~3799K13~~
~~5274T691~~
~~5544T38~~
~~60765K343~~
~~7813A47~~
~~8297T174~~
~~8297T169~~
~~8483A24~~
91290A332
~~91595A485~~
~~91595A567~~
~~91595A741~~
~~91611A159~~

92605A166

92981A215

94285A515

98541A139

Finished Goods Parts manually added to Plex this week

D350-607-541MG

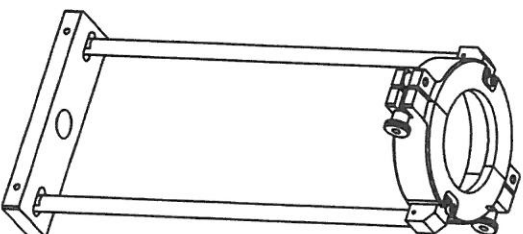
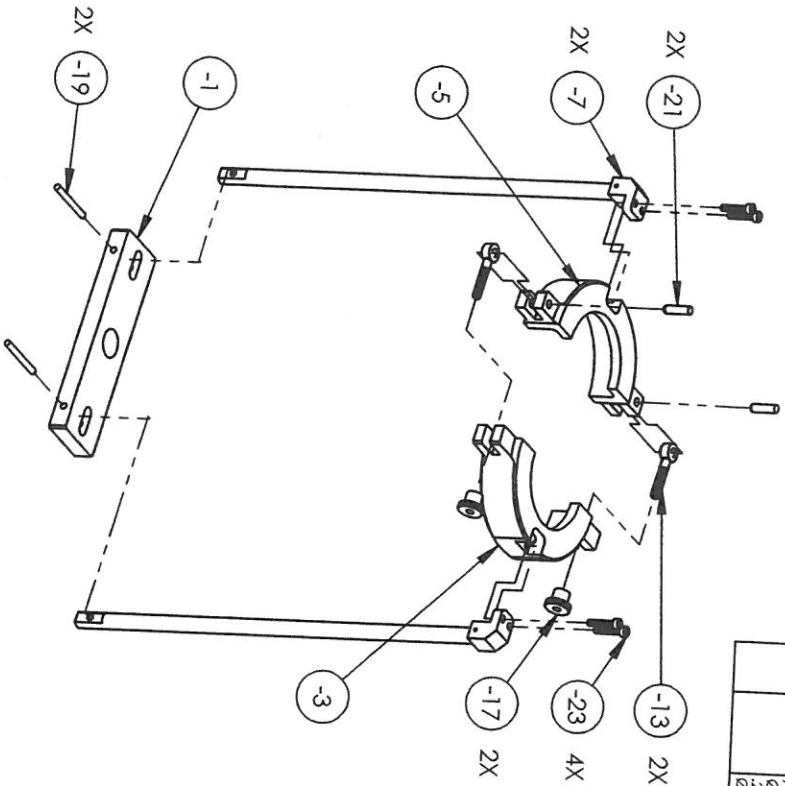
DALL-50-C-B-A-1

RBEL133M6705-101

DSI 9428-011

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| REV | ECR | DESCRIPTION | DATE | INITIAL | APPROVED |
|-----|---------|--|------------|---------|----------|
| 2 | 16-0220 | ADDED NOTE 1 SHEET 1. -1, -3, -5, -7 ADDED FINISH QMSI-6.22 B.O. REV D. -1, -7 CHD MATERIAL (S.F. -19) WAS 8.650 IS 8.65, WAS 2.360 IS 2.36, WAS 7.50 IS 7.5, -3, -5 CHD MATERIAL WAS 41.40/41.42, ADDED HEAT TREAT RC 28-34, -3 CHD DIM WAS 2X .770 IS 2X .77, ADDED DIM 2X .91, ADDED ENGRAVE NOTE -5 CHD DIM WAS 2X .770 IS 2X .77, ADDED DIM 2X .91, ADDED ENGRAVE NOTE -7 CHD DIM WAS 2X .770 IS 2X .77, ADDED DIM 2X .91, 240 DELETED DIM .395, -11 CHD DIM WAS 2X .510 IS 2X .510, WAS 1.200 IS 1.20, WAS .600 IS .60, WAS 2.391/2.397 THRU ALL IS 2.362/2.357 THRU ALL (P.F. -19), ADDED DIM .56 2X .620/615 (S.F. -91). | 11/14/2016 | RJC | SM |



NOTES:
1. REF: EUROCOPTER T/N 1X53 166 817.
2. USED IN KIT RBEA62316

DART
AEROSPACE
PULLER

RBE1X53-166-817

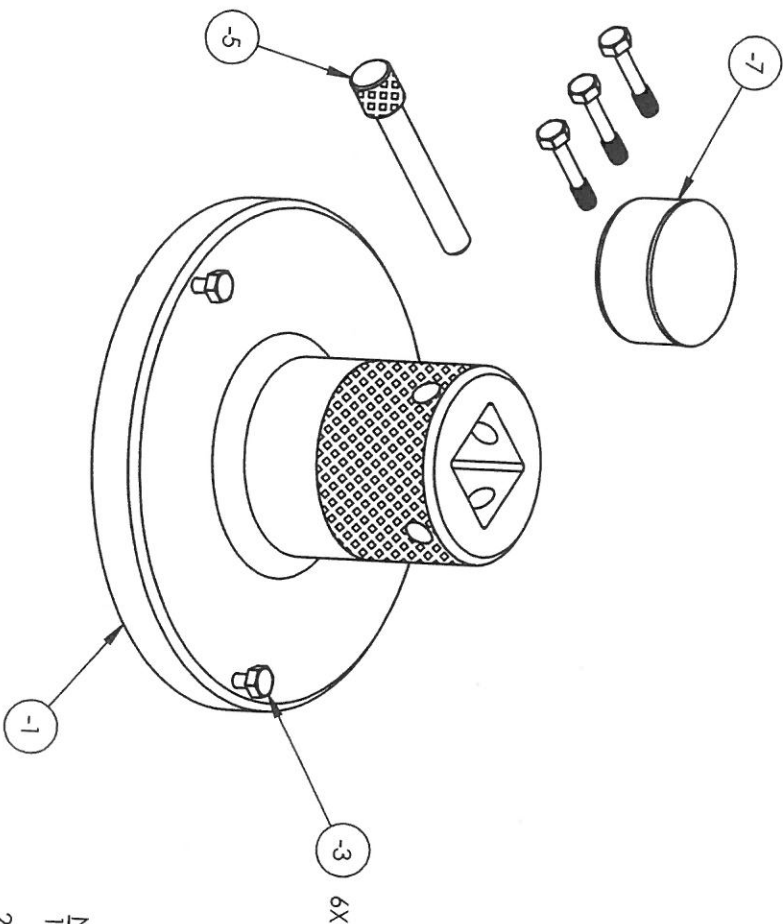
| ASSY QTY | ASSY QTY | Part # | UNIT QTY | Description | Material | B/O INFORMATION OR SPECIFICATIONS | P.G. |
|----------|----------|--------|----------|-------------|------------------|---|------|
| | | -1 | 1 | BASE PLATE | A36/1018/1020 HR | | 2 |
| | | -3 | 1 | RING | 4140/4142 | | 2 |
| | | -5 | 1 | RING 2 | 4140/4142 | | 3 |
| | | -7 | 2 | WELDMENT | | | 4 |
| | | -9 | 1 | ROD TOP | A36/1018/1020 HR | | 5 |
| | | -11 | 1 | ROD | 1018/1020 CR | | 6 |
| | | -13 | 2 | ROD END | STEEL | M8 X 1.25 X 50mm (MCMaster-CARR #379K13) | 7 |
| | | -15 | 2 | SPRING PIN | STEEL | Ø1/8 X 7/8 (MCMaster-CARR #90692A699) | 1 |
| | | -17 | 2 | KNOB | STEEL | M8 X 1.25 (MCMaster-CARR #60765K343) | 5 |
| | | -19 | 2 | DOWEL PIN | STEEL | 6mm X 60mm (MCMaster-CARR #91595A485) | 1 |
| | | -21 | 2 | DOWEL PIN | STEEL | 8mm X 30mm (MCMaster-CARR #91595A567) | 1 |
| | | -23 | 4 | SCREW | STEEL | M6 X 1 X 30mm SHCS (MCMaster-CARR #91290A332) | 1 |
| | | -25 | 4 | SCREW | STEEL | | 1 |

| | | | | |
|-------------|-----------|------|-----------|--------------|
| TITLE | REVISION | DATE | INITIAL | APPROVED |
| PULLER | | | | |
| DWG NO. | | | | |
| MATL | | | | |
| FINISH | | | | |
| SPEC | | | | |
| CHECKED BY: | GILBERT | | | |
| OPS APPR: | DUERFELDT | | | |
| QA APPR: | ANDERSON | | | |
| APPROVED: | LINDSAY | | | |
| SCALE | 1:1 | DATE | 6/18/2012 | SHEET 1 OF 7 |

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS 1/8
DECIMALS .01
ANGLES 45°
SURFACES = 125/
1. BREAK ALL SHARP EDGES
2. DIMENSIONAL LIMITS APPLY
3. INTERFERING DIM AND TOL PER
ASME Y14.5M-2009
USED ON MODEL

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| REV | ECR | DESCRIPTION | DATE | INITIAL | APPROVED |
|-----|---------|--|-----------|---------|----------|
| A | | CHD-1 ENGRAVE NOTE FROM ENGRAVE P/N. CORRECTED DEPTH DIM. OF SLOT FROM .260 TO .210 PER G.E. | 4/8/2013 | RJC | GE |
| 2 | 15-0215 | UPDATED TO NEW DRAFTING STANDARDS. CHD TITLE WAS SPANNER IS SOCKET WRENCH. | 8/31/2015 | DPD | JAG |



- NOTES:
1. USED IN KIT RBEA62315, MAST NUT TORQUE TOOL KIT.
 2. USED IN KIT RBEA62316, EC135 MAST CHANGE KIT.

DART
AEROSPACE

SOCKET WRENCH

DWG NO. RBE1X36-166-807

REV 2

DRAWN BY: GILBERT

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

XXX ± .005 FRACTIONS ± 1/8

XX ± .01 ANGLES ± .5°

1. BREAK ALL SHARP EDGES .015 x 45°

2. DIMENSIONAL LIMITS APPLY AFTER PLATING

SCALE 1:2 DATE 3/15/2012

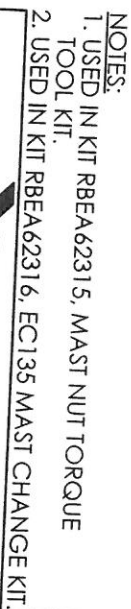
USED ON MODEL EC135

SHEET 1 OF 4

| ASSY QTY | ASSY QTY | B/O | Part # | UNIT QTY | Description | Material | B/O INFORMATION OR SPECIFICATIONS | PG. |
|----------|----------|-----|--------|----------|-------------|-------------------|---|-----|
| | | -1 | 1 | 1 | SPANNER | 4140 Q&T/4142 Q&T | | 1 |
| | | -3 | 6 | 1 | SCREW | STEEL | M5 x .8 x .25 (MCMASTER-CARR #91280A234) MODIFIED | 2 |
| | | -5 | 1 | 1 | PIN | 4140/4142 | | 3 |
| | | -7 | 1 | 1 | NUT | PLASTIC | Ø1.58 X .73 (MCMASTER-CARR #52741691) | 4 |

| REVISIONS | | | |
|-----------|---------|--|----------|
| REV | ECR | DESCRIPTION | |
| 2 | 15-0216 | UPDATED TO NEW DRAFTING STANDARDS. CHD TITLE WAS SUPPORT IS FUTURE ASSEMBLY. -3 & -5 ADDED FINISH ZINC PLATE | |
| | | DATE | INITIAL |
| | | | APPROVED |

| | DESCRIPTION | DATE | INITIAL | APPROVED |
|---|---|-----------|---------|----------|
| 2 | 15-0216 | 8/31/2015 | DPD | JAG |
| | UPDATED TO NEW DRAFTING STANDARDS. CHD TITLE WAS SUPPORT IS FIXTURE ASSEMBLY. -3 & -5 ADDED FINISH ZINC PLATE | | | |

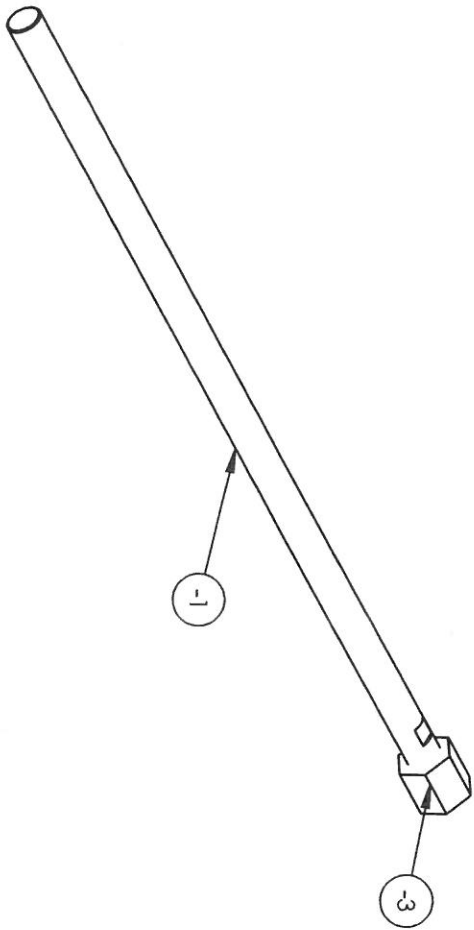


| ASSY QTY | ASSY QTY | B/O | Part # | UNIT QTY | Description | Material | B/O INFORMATION OR SPECIFICATIONS | PG. |
|----------|----------|-----|--------|----------|-------------|----------|---|-----|
| | | | -1 | 1 | SUPPORT | 6061 | Ø9-5/8 x 5-1/8 | 2 |
| | | | -3 | 7 | SCREW | STEEL | M6x1 X 30 (MCMASTER-CARR #9526A576) MODIFIED | 3 |
| | | | -5 | 1 | PIN | STEEL | Ø1/2 X 1-1/8 (MCMASTER-CARR #9881A713) MODIFIED | 4 |
| | | B/O | -7 | 1 | HEX L KEY | STEEL | 5mm (MCMASTER-CARR #7813A47) | 1 |

| RBE1X46-175-575 | | REV |
|---|--|-----|
| MATL | | 2 |
| <p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>XXX ± .005 FRACTIONS ± 1/8 ANGLES ± .5°</p> <p>1. BREAK ALL SHARP EDGES .015 x 45° 2. DIMENSIONAL LIMITS APPLY AFTER PLATING</p> <p>SCALE 1:3 DATE 3/15/2012 SHEET 1 OF 4</p> | | |
| <p>DRAWN BY: GILBERT</p> <p>APPROVED <i>D. White</i></p> <p>HEAT TREAT FINISH SPEC</p> <p>USED ON MODEL EC135</p> | | |

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| REV | DESCRIPTION | REVISIONS | DATE | INITIAL | APPROVED |
|-----|-------------|-----------|------|---------|----------|
|-----|-------------|-----------|------|---------|----------|



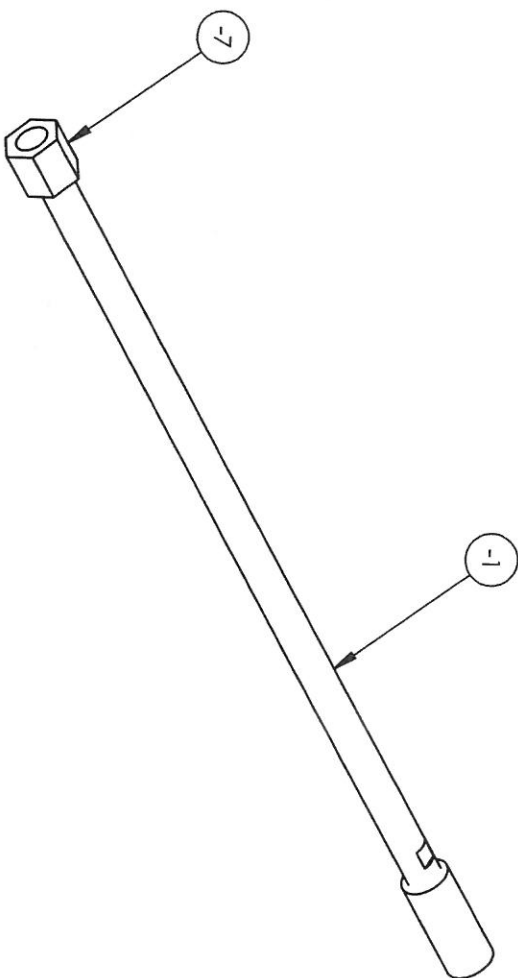
NOTE:
ALSO USED IN KIT RBEA62316.

| ASSY QTY | ASSY QTY | B/O | Part # | UNIT QTY | Description | Material | B/O INFORMATION OR SPECIFICATIONS | P.G. |
|----------|----------|-----|--------|----------|--------------|----------|---------------------------------------|------|
| | | | -1 | 1 | ROD | 12L14 | Ø20mm X 23-3/4 MCMASTER-CARR #5544138 | 2 |
| | | | -3 | 1 | COUPLING NUT | 1018 | HEX 1-1/4 X 1-5/16 | 3 |

| | |
|--|--------------------------|
| RED BARN MACHINE | |
| TITLE ROD ASSEMBLY | |
| DWG NO. RBEVR-L11-0010-002-D | REV |
| MATERIAL UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± .6° 1. BREAK ALL SHARP EDGES .016 X 45° OR .016R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING | |
| DRAWN BY: GILBERT | APPROVED: <i>D. Muel</i> |
| SPEC USED ON MODEL EC135 | |
| SCALE 1:4 | DATE 4/11/2012 |
| SHEET 1 OF 3 | |

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| REV | DESCRIPTION | REVISIONS | DATE | INITIAL | APPROVED |
|-----|-------------|-----------|------|---------|----------|
| | | | | | |



| ASSY QTY | ASSY QTY | B/O | Part # | UNIT QTY | Description | Material | B/O INFORMATION OR SPECIFICATIONS | PG. |
|----------|----------|-----|--------|----------|--------------|----------|---------------------------------------|-----|
| X | 1 | -1 | 1 | 1 | ROD WELDMENT | 12L14 | Ø20mm X 23.3/4 MCMASTER-CARR #5544738 | 2 |
| 1 | 1 | -3 | | | ROD | 12L14 | | 3 |
| 1 | 1 | -5 | | | SLEEVE | 12L14 | Ø1-1/8 X 2-5/8 | 4 |
| 1 | 1 | -7 | 1 | 1 | COUPLING NUT | 1018 | HEX 1-1/4 X 1-5/16 | 1 |

USED IN KIT RBEA62316



RED BARN MACHINE

ROD ASSEMBLY

TITLE

DWG NO.

RBEVR-L11-0010-002-B

REV

MAT'L

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

.XXX ± .005

.XX ± .01

.X ± .1

FRACTIONS ± 1/32

ANGLES ± .5°

1. BREAK ALL SHARP EDGES .016 X 45°

2. DIMENSIONAL LIMITS APPLY AFTER

PLATING

SCALE

1:4

DATE

4/11/2012

SHEET 1 OF 5

DRAWN BY: GILBERT

APPROVED

FINISH

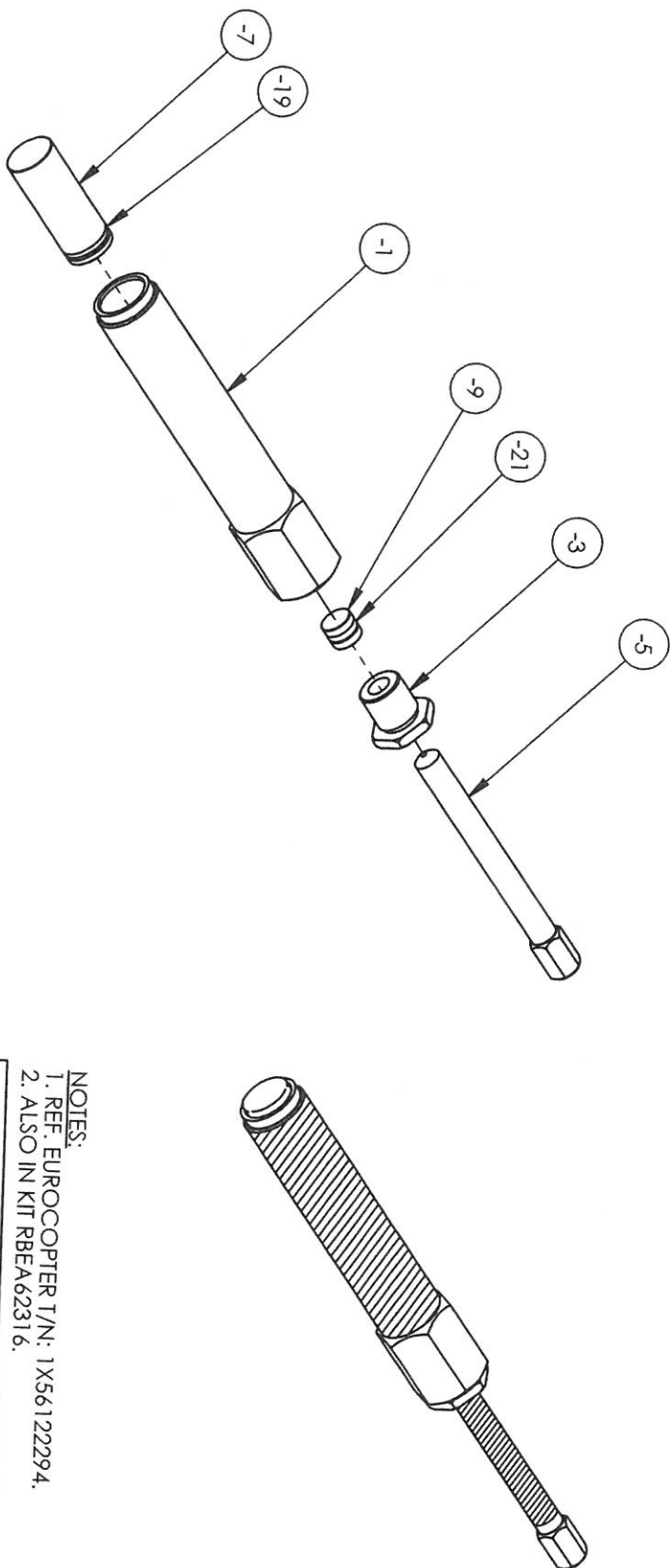
SPEC

USED ON MODEL

EC135

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| REV | ECR | DESCRIPTION | DATE | INITIAL | APPROVED |
|-----|----------|--|------------|---------|----------|
| 1 | 16-01 60 | UPDATED TO NEW STANDARDS. -1 CHD DIM WAS Ø.551+0.05/-0.00 THRU ALL. WAS Ø.8680/8655 IS Ø.876/874. WAS Ø.728 ±.80 M20X1.5 - 6H ±.70 IS M20X1.5 - 6H ±.80. ADDED DIM. 750. -3 CHD MATL WAS 1018 IS 1018/1020 CR. -5 CHD MATERIAL WAS 1018 IS 1018/1020 CR. CHD DIM WAS M12X1.5 IS M12X1.5 - 6G. ADDED DIM SR.313. -7 CHD MATL WAS 4140 Q&T IS 303 S.S. REMOVED FINISH. REMOVED DIM M5X0.8 - 6H ±.39 Ø.317. 220. CHD DIM WAS 1.968 IS 2.22. WAS Ø.8652/8648 IS 2X Ø.872/871. ADDED DIM. 145/140. 25. 2X R.005. 2X R.04. CHD DIM WAS Ø.548+0.00/-0.05 IS 2X Ø.560/559. WAS 275 IS .45. ADDED DIM Ø.384. 145/140. 155. 2X R.01. 2X R.005. 250. R.313. | 10/11/2016 | SM | JAG |



NOTES:
1. REF. EUROCOPTER T/N: 1X56122294.
2. ALSO IN KIT RBEA62316.

DART
AEROSPACE

PUSH-OUT DEVICE

RBE1X56-122-294

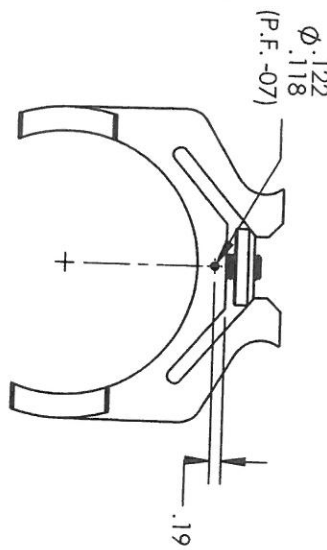
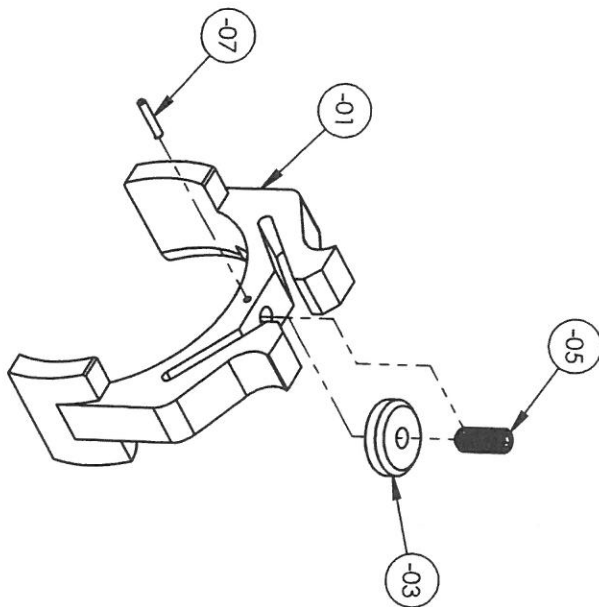
| ASSY QTY | ASSY QTY | Port # | UNIT QTY | Description | Material | B/O INFORMATION OR SPECIFICATIONS | PG. | DWG NO. | REV |
|----------|----------|--------|----------|--------------|--------------|--------------------------------------|-----|---------|-----|
| | | -1 | 1 | OUTSIDE ROD | 4140/4142 | | 1 | | |
| | | -3 | 1 | PLUG | 1018/1020 CR | | 2 | | |
| | | -5 | 1 | THREADED ROD | 1018/1020 CR | | 3 | | |
| | | -7 | 1 | LARGE PISTON | 303 S.S. | | 4 | | |
| | | -9 | 1 | SMALL PISTON | 303 S.S. | | 5 | | |
| | | -19 | 1 | LARGE O-RING | VITON | DASH # 115 (MCMASTER-CARR # 8297174) | 6 | | |
| | | -21 | 1 | SMALL O-RING | VITON | DASH # 110 (MCMASTER-CARR # 8297169) | 1 | | |

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS 1/8
DECIMALS .01
ANGLES ±.5°
SURFACES = 125/
1. BREAK ALL SHARP EDGES
2. DIMENSIONAL LIMITS APPLY
3. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009

SCALE 1:3 DATE 4/11/2012 SHEET 1 OF 6
EC135
USED ON MODEL

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| REVISIONS | | | | |
|-----------|---------|---|-----------|---------|
| REV | ECR | DESCRIPTION | DATE | INITIAL |
| A | | ADDED .593 DIM AND REF. 1.574 DIM. | 3/14/2011 | JAG |
| B | | ADDED DASHES TO DWG NUMBER. | 8/3/2011 | JAG |
| C | | REMOVED DASHES IN DWG. NUMBER. ADDED Ø3mm CALLOUT. CHD RADIUS FROM R.391 TO R.397. | 5/23/2017 | JAG |
| 4 | 17-0125 | ADDED NOTE 2 SHF 1. -01 CHD DIM WAS 2.585 IS (2.581) WAS 1.88 IS 1.19, WAS Ø.118 IS Ø.122, 1.18 THRU ALL (P.F. -07). WAS R.491 (X2) IS 2X R.49, WAS R.406 (X2) IS 2X R.41, WAS 5.13 IS (5.13). ADDED SECTION VIEW A-A. ADDED DIM 1.813. ADDED NOTES A & A. DELETED Ø.118 THRU HOLE AND WAS 1.001. 3.15 M10X1.5-6H THRU ALL. -05 DELETED DRAWING SHEET. ADDED VIEW TO SHEET 1 TO DRILL HOLE AT ASSEMBLY. | 5/23/2017 | RJC |
| | | | | JAG |



NOTES:
1. USED IN KIT RBEA62410.
2. REFERENCE EUROCOPTER T/N L133M6705-101.



TITLE
SWASH PLATE FIXATION CLAMP

DWG NO. RBEL133M6705-101

MATL

FINISH

SPEC

CHECKED:

QA APPR:

APPROVED:

REV 4

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS ± 1/16
DECIMALS ± .01
ANGLES ± .5°
SURFACES = 125/

1. BREAK ALL SHARP EDGES
2. DIMENSIONAL LIMITS APPLY
3. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009

USED ON MODEL

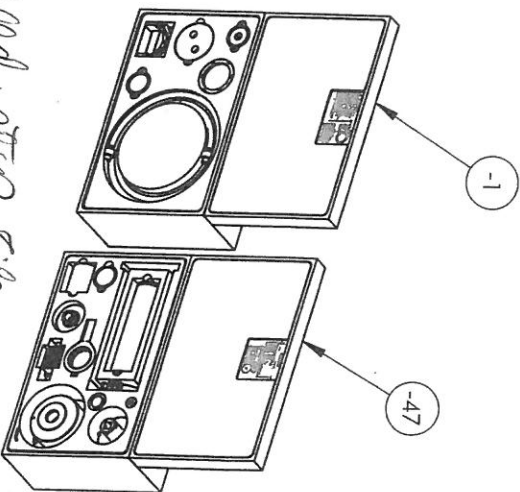
EC135

SCALE 1:3 DATE 4/6/2010 SHEET 1 OF 3

| ASSY QTY | ASSY QTY | B/O | Part # | UNIT QTY | Description | Material | B/O INFORMATION OR SPECIFICATIONS | P.G. |
|----------|----------|-----|--------|----------|-----------------------|--------------------|---|------|
| | | | -01 | 1 | CLAMP BODY | WHITE DELRIN/ACEAL | | 2 |
| | | | -03 | 1 | KNURLED THUMB NUT | 303/304 S.S. | | 3 |
| | | | -05 | 1 | SOCKET HEAD SET SCREW | S.S. | M10 X 1.5mm X 25mm (MCMASTER-CARR #92205A166) | 1 |
| | | | -07 | 1 | SLOTTED SPRING PIN | STEEL | Ø3mm X 20mm (MCMASTER-CARR #91611A159) | 1 |

much.

| REV | ECR | DESCRIPTION REVISIONS | DATE | INITIAL | APPROVED |
|-----|---------|--|-----------|---------|----------|
| A | | -11- CORRECTED ITEM 33 P/N & DESCRIPTION FROM RBEU 13M-6705-101 SPINDLE TO RBEU1X56-122-264 PUSH-OUT DEVICE. | 4/29/2013 | RJC | RW |
| 2 | 1502019 | UPDATED TO NEW DRAFTING STANDARDS. CHD DESCRIPTIONS WAS SPANNER IS SOCKET WRENCH, ASSEMBLY SCREW DRIVER IS TORQUE MULTIPLIER & COUNTER HOLDER, WAS SUPPORT IS FUTURE NUMBERS, REMOVED TOOL DASH NUMBERS. -1 & -47 REPLACED TOOL DASH NUMBERS WITH TOOL DIMS WAS 6.00 DIM WAS 8.00 IS 4X 9.00, DELETED DIMS 8.985, 9.50, DELETED DIMS 1.38, 1.60, 1.80, 7.61. ADDED DIMS 5.91, 7.29, 9.41, 6.18, 7.02, 9.87, 14.32, IS V 3.37, 4X R, 2X R, 0.51 CHD DIM WAS 8.00 IS 4X 9.00, DELETED DIMS 8.985, 9.50, DELETED DIMS 1.38, 1.60, 1.80, 7.61. ADDED DIMS 5.91, 7.29, 9.41, 6.18, 7.02, 9.87, 14.32, IS V 3.37, SUPPORT IS FUTURE ASSEMBLY WAS SPANNER IS SOCKET WRENCH, WAS SERVICE SCREW DRIVER IS TORQUE MULTIPLIER & COUNTER HOLDER. -55 CHD DIM WAS 3.55 IS 3.29, CHD TOLERANCE ON NON-CRITICAL DIMENSIONS. | 9/1/2015 | DPD | JAG |

[illegible]

Need water filter

2PART AEROSPACE

EC135 MAST CHANGE KIT

RBEA62316

DRAWN BY: GILBERT

APPROVED
DATE

FINISH

SPEC

| USED ON MODEL |
|---------------|
|---------------|

| | |
|---------|---------|
| 11/2012 | SHIFT 4 |
|---------|---------|

Chantal Lavoie

From: Daniel Paquette
Sent: Friday, January 04, 2019 8:15 AM
To: Michelle GagnonDonovan; Chantal Lavoie
Subject: Parts to enter into PLEX/Order Ref: RBE105-14101W11

Michelle please enter into PLEX. Thanks.
Chantal please order 2 of this. Thanks.

| | | | | | | | |
|---|---------------|-------------|----------|---|--------|--------|----|
| 1/4" | -0.004" to 0" | Cold Worked | Hardened | 6628K23 | \$1.69 | \$4.23 | \$ |
| Product Detail | | | |  | | | |
| Easy-to-Machine 1144 Carbon Steel Rod, Ultra-Strength, 1/4" Diameter | | | | <input type="checkbox"/> | Each | | |
| Length, ft. | | | | ADD TO ORDER | | | |
| ✓ 6 | | | | In stock | | | |
| 5/16" | -0.004" to 0" | Cold Worked | Hardened | 6628K25 | 2.31 | 5.78 | 1 |

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042203

Order Placed By
Chantal Lavoie

McMaster-Carr Number
6168959-04

Page 1 of 2

01/08/2019

| Line | Product | Ordered | Shipped |
|------|--|---------|---------|
| 2 | 59915K274 Corrosion-Resistant Ball Joint Rod End, 3/8"-24 Thread, Right Hand | 15 Each | 15 |
| 3 | 69525K14 Noninsulated Quick-Disconnect Terminals, Single-Crimp Female, 16-14 Gauge, 0.11" Wide x 0.02" Thick Tab, Packs of 100 | 3 Packs | 3 |
| 5 | 8297T169 Hard Viton Fluoroelastomer O-Ring, Chemical-Resistant, 3/32 Fractional Width, Dash Number 110, Packs of 10 | 1 Pack | 1 |
| 6 | 8297T174 Hard Viton Fluoroelastomer O-Ring, Chemical-Resistant, 3/32 Fractional Width, Dash Number 115, Packs of 10 | 1 Pack | 1 |
| 8 | 8908K62 Spring-Back 304 Stainless Steel Wire, Matte Finish, 1-Foot Long, 0.059" Diameter, Packs of 100 | 1 Pack | 1 |
| 9 | 90977A165 Medium-Strength Steel Coupling Nut, Grade 5, 3/8"-16 Thread Size | 10 Each | 10 |
| 10 | 91595A446 Alloy Steel Dowel Pin, 6mm Diameter, 16mm Long, Packs of 25 | 1 Pack | 1 |
| 11 | 91611A213 Steel Slotted Spring Pin, 4mm Diameter, 30mm Long, Packs of 100 | 1 Pack | 1 |
| 12 | 91611A216 Steel Slotted Spring Pin, 4mm Diameter, 36mm Long, Packs of 100 | 1 Pack | 1 |
| 13 | 92620A875 Zinc Yellow-Chromate Plated Hex Head Screw, Grade 8 Steel, 3/4"-16 Thread Size, 3" Long, Fully Threaded, Packs of 1 | 3 Packs | 3 |
| 14 | 97484A055 Large-Diameter Low-Profile Domed Head Rivets, Solid, 3/32" Diameter, 0.25" Long, Packs of 250 | 1 Pack | 1 |
| 15 | 98025A031 Zinc Yellow-Chromate Plated Steel Oversized Washer, Grade 8, for 3/8" Screw Size, 0.406" ID, 0.812" OD, Packs of 50 | 1 Pack | 1 |
| 19 | 2458K14 Lubrication-Free Ball Joint Rod End, 3/8"-24 Thread, Right-Hand | 6 Each | 6 |
| 20 | 3799K13 Partially Threaded Rod End Bolt, M8 x 1.25mm Shank Thread, 50mm Shank Center Length | 6 Each | 6 |
| 21 | 5274T691 Polypropylene Plastic Vials with Tight Fitting Lid, 0.5 oz./15 ml Capacity, Packs of 10 | 1 Pack | 1 |
| 22 | 60765K348 Steel Round Knob with M8 x 1.25mm Threaded Through Hole, 25mm Diameter Head | 10 Each | 10 |
| 23 | 7813A47 High-Visibility Gold Ball-End L-Key, 5 mm Size | 6 Each | 6 |
| 24 | 84835A24 Press-Fit Ball-Nose Spring Plunger, Stainless Steel Nose with Steel Body, 0.31" Body Diameter, 8 to 16 lb. Nose Force | 6 Each | 6 |
| 25 | 91290A332 Black-Oxide Alloy Steel Socket Head Screw, M6 x 1 mm Thread, 30 mm Long, Packs of 50 | 1 Pack | 1 |

Rec'd 307

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042203

Page 2 of 2

Order Placed By
Chantal Lavoie

01/08/2019

McMaster-Carr Number
6168959-04

| Line | Product | Ordered | Shipped |
|------|--|-------------|---------|
| 26 | 91595A485 Alloy Steel Dowel Pin, 6mm Diameter, 60mm Long, Packs of 10 | 1 Pack | 1 |
| 27 | 91595A567 Alloy Steel Dowel Pin, 8mm Diameter, 30mm Long, Packs of 10 | 1 Pack | 1 |
| 28 | 91595A741 Alloy Steel Dowel Pin, 12mm Diameter, 36mm Long, Packs of 5 | 2 Packs | 2 |
| 29 | 91611A159 Steel Slotted Spring Pin, 3mm Diameter, 20mm Long, Packs of 200 | 1 Pack | 1 |
| 30 | 92605A166 Stainless Steel Flat-Tip Set Screw, 18-8, M10 x 1.5 mm Thread, 25 mm Long, Packs of 5 | 2 Packs | 2 |
| 31 | 92981A215 Alloy Steel Shoulder Screws, 8 mm Shoulder Diameter, 60 mm Shoulder Length, M6 x 1 mm Thread | 100 Each | 100 |
| 32 | 94285A515 Knurl-Grip Cup-Point Set Screws, Alloy Steel, M6 x 1 mm Thread, 8 mm Long, Packs of 50 | 1 Pack | 1 |
| 33 | 98541A139 External Retaining Ring for 32 mm OD, Black-Phosphate 1060-1090 Spring Steel, Packs of 10 | 1 Pack | 1 |

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042203

Order Placed By
Chantal Lavoie

McMaster-Carr Number
6168959-01

Packing List

Page 1 of 1

01/08/2019

| Line | Product | Ordered | Shipped |
|------|--|-----------|---------|
| 18 | 8539K95 ✓ Nylon Sheet, Off-White, 24" x 24" x 1/4" | 1 Each | 1 ✓ |

30 Aurora Industrial Pkwy
 Aurora OH 44202-8087
 30-995-5500
 e.sales@mcmaster.com

Dart Aerospace Ltd
 1270 Aberdeen St
 Hawkesbury ON K6A 1K7
 Canada

Purchase Order
PO042203

Order Placed By
Chantal Lavoie

McMaster-Carr Number
6168959-02

Page 1 of 1

01/08/2019

| ne | Product | Ordered | Shipped |
|----|---|-----------|---------|
| 3 | 8739K61 White Delrin® Acetal Resin Oversized Bar, 1-1/4" Thick, 3" Wide, 4' Length | 4 Feet | 4 ✓ |
| 7 | 8739K67 White Delrin® Acetal Resin Oversized Bar, 1-1/2" Thick, 3" Wide, 4' Length | 4 Feet | 4 ✓ |

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO042203

Page 1 of 1

Order Placed By
Chantal Lavoie

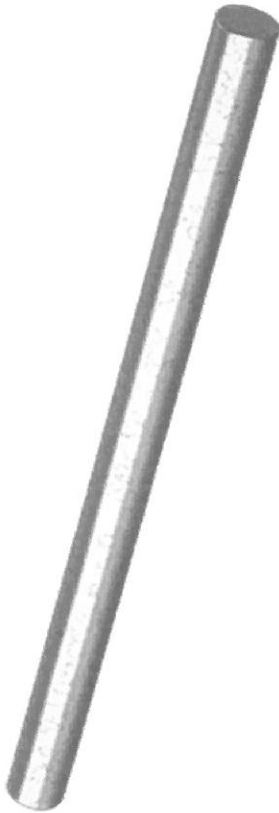
01/08/2019

McMaster-Carr Number
6168959-03

| Line | Product | Ordered | Shipped |
|------|--|-----------|---------|
| 1 | 5544T38 Tight-Tolerance 12L14 Carbon Steel Rod, Ultra-Machinable, 20 mm Diameter, 6 Feet Long | 2 Each | 2 |
| 4 | 6628K23 Easy-to-Machine 1144 Carbon Steel Rod, Ultra-Strength, 1/4" Diameter, 6 Feet Long | 2 Each | 2 |
| 7 | 8893K178 Tight-Tolerance Multipurpose O1 Tool Steel Rod, 0.1875" Diameter, 6 Feet Long | 1 Each | 1 |

Tight-Tolerance 12L 14 Carbon Steel Rod
Ultra-Machinable, 20 mm Diameter

5544T382



| | |
|---------------------------------------|---------------------------------------|
| Material | 12L14 Carbon Steel |
| Cross Section Shape | Round |
| Construction | Solid |
| Appearance | Plain |
| Mechanical Finish | Precision Ground |
| Diameter | 20mm |
| Diameter Tolerance | -0.012mm to 0mm |
| Yield Strength | 65,000 psi |
| Temper Rating | Softened (Annealed) |
| Hardness | Rockwell B80 |
| Hardness Rating | Medium |
| Heat Treatable | Yes |
| Maximum Hardness after Heat Treatment | Rockwell C65 |
| Temperature Range | Not Rated |
| Specifications Met | ASTM A108 |
| Straightness Tolerance | 1/16" per 3 ft. |
| Density | 0.28 lbs./cu. in. |
| Surface Resistivity | 16.5 microhm-cm @ 68° F |
| Thermal Conductivity | 380 Btu/hr. x in./sq. ft./°F @ 212° F |
| Coefficient of Thermal Expansion | 7.9 x 10 ⁻⁶ |
| Elongation | 14.5% |
| Material Composition | |
| Iron | 97.91-98.70% |
| Carbon | 0.15% Max. |
| Lead | 0.15-0.35% |
| Manganese | 0.85-1.15% |

| | |
|------------|--|
| Phosphorus | 0.04-0.09% |
| Sulfur | 0.26-0.35% |
| Warning | Physical and mechanical properties are not guaranteed. They are intended only as a basis for comparison and not for design purposes. |
| Length | 1 ft., 3 ft., 6 ft. |

These precision-ground rods have a diameter tolerance of $-0.0005"$ (-0.012 mm) and a straightness tolerance of $1/16"$ per 3 ft. The lead additive acts as a lubricant, which allows 12L14 carbon steel to withstand very fast machining. It's used to fabricate a wide variety of machine parts.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 5544T38
 DATE: 19/01/17

PO / BATCH NO.: P0042203 / 5144325

MATERIAL CERT REC'D: Y
 QUANTITY RECEIVED: 124
 QUANTITY INSPECTED: 124
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 20mm
 THICKNESS RECEIVED: 20mm
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

| DESCRIPTION | NCR (Check Y/N) | | COMMENTS |
|---|-------------------------------------|-------------------------------------|-----------------------------|
| SURFACE DAMAGE | Y | <input checked="" type="checkbox"/> | |
| CORRECT FINISH | <input checked="" type="checkbox"/> | N | |
| CORROSION | Y | <input checked="" type="checkbox"/> | |
| CORRECT GRAIN DIRECTION | <input checked="" type="checkbox"/> | N | |
| CORRECT MATERIAL PER M-DRAWING | Y | N | <i>See McMaster drawing</i> |
| CORRECT THICKNESS | <input checked="" type="checkbox"/> | N | |
| PHOTO REQUIRED | Y | <input checked="" type="checkbox"/> | |
| CORRECT REF # TO LINK CERT | <input checked="" type="checkbox"/> | N | <i>P0042203</i> |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="checkbox"/> | N | |
| CORRECT M# ON THE MATERIAL | Y | N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y | <input checked="" type="checkbox"/> | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y | <input checked="" type="checkbox"/> | |

| CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
|---|-------------------------------------|
| INSPECTED BY: <u>DAS 61 9-89</u> DATE: <u>19/01/17</u> | SIGNED OFF BY: _____ DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



Easy-to-Machine 1144 Carbon Steel Rod
Ultra-Strength, 1/4" Diameter



6628K23

| | |
|---------------------------------------|---------------------------------------|
| Material | 1144 Carbon Steel |
| Cross Section Shape | Round |
| Construction | Solid |
| Appearance | Plain |
| Diameter | 1/4" |
| Diameter Tolerance | -0.004" to 0" |
| Tolerance Rating | Undersized |
| Yield Strength | 125,000 psi |
| Fabrication | Cold Worked |
| Temper Rating | Hardened |
| Hardness | Rockwell C30 |
| Hardness Rating | Hard |
| Heat Treatable | Yes |
| Maximum Hardness after Heat Treatment | Not Rated |
| Temperature Range | Not Rated |
| Straightness Tolerance | Not Rated |
| Density | 0.28 lbs./cu. in. |
| Surface Resistivity | 17 microhm-cm @ 68° F |
| Thermal Conductivity | 350 Btu/hr. x in./sq. ft./°F @ 212° F |
| Coefficient of Thermal Expansion | 7.4 x 10 ⁻⁶ |
| Elongation | 6.5% |
| Material Composition | |
| Iron | 97.50-98.01% |
| Carbon | 0.40-0.48% |
| Manganese | 1.35-1.65% |
| Phosphorus | 0.04% Max. |

| | |
|--------|---------------------|
| Sulfur | 0.24-0.33% |
| Length | 1 ft., 3 ft., 6 ft. |
| RoHS | Not Compliant |

Containing more carbon and manganese than 1117, 1144 carbon steel offers higher yield strength and hardness, even without further heat treatment. Use it to fabricate parts that require stress resistance. Also known as Fatigueproof, these rods have enhanced strength and resistance to breaking from repeated impact compared to High-Strength Easy-to-Machine 1144 Carbon Steel Rods.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 6628K23
DATE: 19/01/17

PO / BATCH NO.: P0042203/S144326

MATERIAL CERT REC'D: *
QUANTITY RECEIVED: 12ft
QUANTITY INSPECTED: 12ft
QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.25"
THICKNESS RECEIVED: 0.25"
SHEET SIZE ORDERED: —
SHEET SIZE RECEIVED: —

| DESCRIPTION | NCR (Check Y/N) | | COMMENTS |
|--|-----------------------|----------|-----------------------------|
| SURFACE DAMAGE | Y | <u>N</u> | |
| CORRECT FINISH | <u>Y</u> | N | |
| CORROSION | Y | <u>N</u> | |
| CORRECT GRAIN DIRECTION | <u>Y</u> | N | |
| CORRECT MATERIAL PER M-DRAWING | Y | N | <i>See McMaster drawing</i> |
| CORRECT THICKNESS | <u>Y</u> | N | |
| PHOTO REQUIRED | Y | <u>N</u> | |
| CORRECT REF # TO LINK CERT | <u>Y</u> | N | <u>P0042203</u> |
| CORRECT MATERIAL IDENTIFICATION | <u>Y</u> | N | |
| CORRECT M# ON THE MATERIAL | Y | N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y | <u>N</u> | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y | <u>N</u> | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| TYPE OF MATERIAL | HRC | HRB | DUR A | DUR D | WEBSTER |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| | | | |
|-----------------------------|----------------------|-----------------------------------|--|
| QC 18 INSPECTION | | ENGINEERING SIGNOFF (if required) | |
| INSPECTED BY: <u>DAS 61</u> | SIGNED OFF BY: _____ | | |
| DATE: <u>19/01/17</u> | DATE: _____ | | |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

Tight-Tolerance Multipurpose O1 Tool Steel Rod
0.1875" Diameter

8893K178



| | |
|---------------------------------------|----------------------|
| Material | O1 Tool Steel |
| Cross Section Shape | Round |
| Construction | Solid |
| Appearance | Plain |
| Diameter | 0.1875" |
| Diameter Tolerance | -0.0005" to 0.0005" |
| Tolerance Rating | Tight |
| Yield Strength | 50,000 psi |
| Temper Rating | Softened (Annealed) |
| Hardness | Rockwell B90 |
| Hardness Rating | Medium |
| Heat Treatable | Yes |
| Maximum Hardness after Heat Treatment | Rockwell C65 |
| Mechanical Finish | Precision Ground |
| Temperature Range | Not Rated |
| Specifications Met | ASTM A681 |
| Straightness Tolerance | Not Rated |
| Density | 0.28 lbs./cu. in. |
| Coefficient of Thermal Expansion | 7.1×10^{-6} |
| Elongation | 25% |
| Material Composition | |
| Iron | 94.79-96.95% |
| Carbon | 0.85-1.05% |
| Chromium | 0.40-0.70% |
| Manganese | 1.00-1.40% |
| Nitrogen | 0.40-0.60% |

| | |
|---------------------------|---|
| Phosphorus | 0-0.030% |
| Silicon | 0-0.50% |
| Sulfur | 0-0.030% |
| Tungsten | 0.40-0.60% |
| Vanadium | 0-0.30% |
| Length | 3 ft., 6 ft. |
| Additional Specifications | Guidelines for Heat Treating Tool Steel |
| RoHS | Compliant |

These precision-ground rods have a tight diameter tolerance. Commonly used for dies, punches, and gauges, O1 tool steel is an oil-hardening material that resists wear and abrasion.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 8893K178
 DATE: 19/01/17

PO / BATCH NO.: P0042203 / 5144327

MATERIAL CERT REC'D: _____
 QUANTITY RECEIVED: 6ft
 QUANTITY INSPECTED: 6ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.1875"
 THICKNESS RECEIVED: 0.1875"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

| DESCRIPTION | NCR (Check Y/N) | | COMMENTS |
|---|------------------------------------|------------------------------------|------------------------------|
| SURFACE DAMAGE | Y | <input checked="" type="radio"/> N | |
| CORRECT FINISH | <input checked="" type="radio"/> Y | N | |
| CORROSION | Y | <input checked="" type="radio"/> N | |
| CORRECT GRAIN DIRECTION | <input checked="" type="radio"/> Y | N | |
| CORRECT MATERIAL PER M-DRAWING | Y | N | <i>See Mc Master drawing</i> |
| CORRECT THICKNESS | <input checked="" type="radio"/> Y | N | |
| PHOTO REQUIRED | Y | <input checked="" type="radio"/> N | |
| CORRECT REF # TO LINK CERT | <input checked="" type="radio"/> Y | N | <u>P0042203</u> |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="radio"/> Y | N | |
| CORRECT M# ON THE MATERIAL | Y | N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y | <input checked="" type="radio"/> N | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y | <input checked="" type="radio"/> N | |

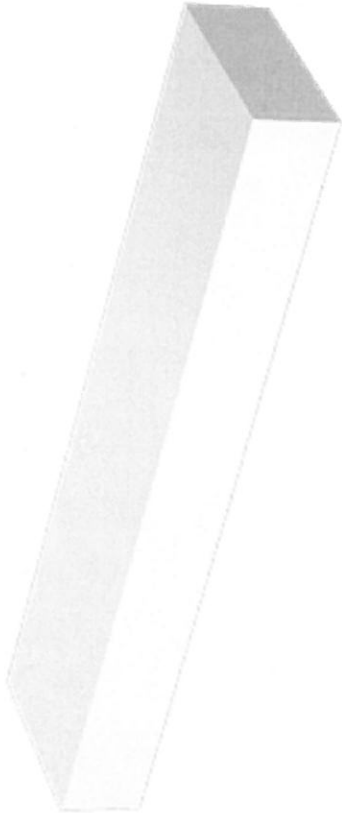
| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
|--|-------------------------------------|
| INSPECTED BY: <u>DAS 61</u> DATE: <u>19/01/17</u> | SIGNED OFF BY: _____ DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

White Delrin® Acetal Resin Oversized Bar
1-1/4" Thick, 3" Wide



In stock
\$35.93 per ft.
8739K61

| | |
|-------------------------|---|
| Material | Delrin® Acetal Plastic |
| Cross Section Shape | Rectangle |
| Construction | Solid |
| Texture | Smooth |
| Color | White |
| Clarity | Opaque |
| Thickness | 1 1/4" |
| Thickness Tolerance | 0" to +0.025" |
| Tolerance Rating | Oversized |
| Width | 3" |
| Width Tolerance | 0" to +1/4" |
| Length | 1 ft., 2 ft., 3 ft., 4 ft. |
| Backing Type | Plain |
| Hardness | Rockwell M90 |
| Hardness Rating | Hard |
| For Use Outdoors | No |
| Temperature Range | -20° to 180° F |
| Impact Strength | 1.00 ft.-lbs./in. |
| Impact Strength Rating | Good |
| Tensile Strength | 9,000 psi |
| Tensile Strength Rating | Good |
| Specifications Met | ASTM D6100, Made of FDA Listed Material, NSF/ANSI Standard 51 for Food Contact, NSF/ANSI Standard 61 for Drinking Water |
| Density | 0.051 lbs./cu. in. |
| Coefficient of Friction | 0.20 |
| Dielectric Strength | 435 V/mil |

| | |
|----------------------------------|---------------------------------|
| Water Absorption | 0.30% |
| Coefficient of Thermal Expansion | 8.5×10^{-5} in./in./°F |
| RoHS | Compliant |

These sheets, bars, and strips are made of Delrin® acetal resin, a wear-resistant material with a naturally slippery surface. Also known as acetal homopolymer, it resists moisture and has the ability to hold tight tolerances. It's often used for gears, bushings, and bearings.



| | | | |
|------------------|---------------|---|------------------------|
| DESIGN # | DRAWN BY # | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED P | APPROVED # | DRAWING NO. M-DELFIN-B | REV. A SHEET 1 OF 1 |
| DATE 02.04.30 | | TITLE DELFIN BAR | SCALE NTS |
| A | 02.04.30 | NEW ISSUE | |
| AI | 02.06.04 | ADD "ACETRON GP ACETAL" AS OPTION | |

PURCHASE MATERIAL:

DELFIN II ISOE OR ACETRON GP ACETAL

PART NUMBER:

M-DELFIN-B | T.TTT | x | WW.WWW | WHERE T.TTT = THICKNESS (IN INCHES)
THICK | WIDTH | WW.WWW = WIDTH (IN INCHES)

EG. 0.5" x 1.0" BAR = M-DELFIN-B 0.500 x 01.000

RELEASED
02.05.06 #

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MDLRINB1.250 x 3.000W
 DATE: 19/01/14

PO / BATCH NO.: P0042203 / S144321

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 4ft
 QUANTITY INSPECTED: 4ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.250"
 THICKNESS RECEIVED: 1.250"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

| DESCRIPTION | NCR (Check Y/N) | COMMENTS |
|--|---|----------|
| SURFACE DAMAGE | Y <input checked="" type="checkbox"/> N | |
| CORRECT FINISH | <input checked="" type="checkbox"/> Y N | |
| CORROSION | Y <input checked="" type="checkbox"/> N | |
| CORRECT GRAIN DIRECTION | <input checked="" type="checkbox"/> Y N | |
| CORRECT MATERIAL PER M-DRAWING | <input checked="" type="checkbox"/> Y N | DELRIN |
| CORRECT THICKNESS | <input checked="" type="checkbox"/> Y N | |
| PHOTO REQUIRED | Y <input checked="" type="checkbox"/> N | |
| CORRECT REF # TO LINK CERT | <input checked="" type="checkbox"/> Y N | P0042203 |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="checkbox"/> Y N | |
| CORRECT M# ON THE MATERIAL | <input checked="" type="checkbox"/> Y N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y <input checked="" type="checkbox"/> N | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y <input checked="" type="checkbox"/> N | |

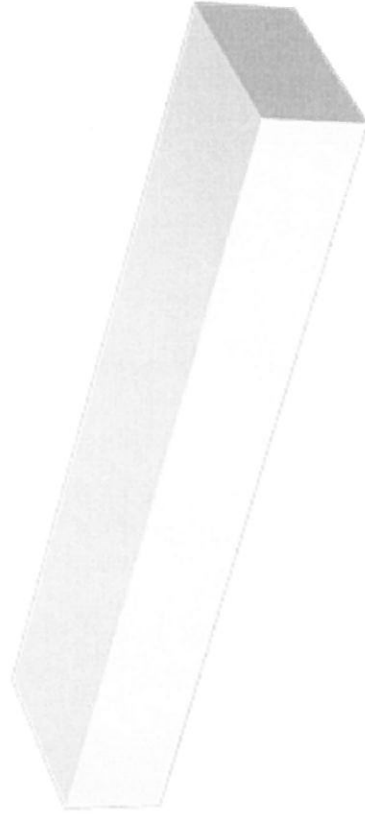
| CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
|--|-----------------------------------|
| INSPECTED BY: <u>DAS</u> <u>31</u> <u>9-09</u> | SIGNED OFF BY: _____ |
| DATE: <u>19/01/14</u> | DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

White Delrin® Acetal Resin Oversized Bar
1-1/2" Thick, 3" Wide



White Delrin® Acetal Resin Oversized Bar, 1-1/2" Thick, 3" Wide | McMaster-Carr

In stock
\$42.66 per ft.
8739K67

| | |
|-------------------------|---|
| Material | Delrin® Acetal Plastic |
| Cross Section Shape | Rectangle |
| Construction | Solid |
| Texture | Smooth |
| Color | White |
| Clarity | Opaque |
| Thickness | 1 1/2" |
| Thickness Tolerance | 0" to +0.025" |
| Tolerance Rating | Oversized |
| Width | 3" |
| Width Tolerance | 0" to +1/4" |
| Length | 1 ft., 2 ft., 3 ft., 4 ft. |
| Backing Type | Plain |
| Hardness | Rockwell M90 |
| Hardness Rating | Hard |
| For Use Outdoors | No |
| Temperature Range | -20° to 180° F |
| Impact Strength | 1.00 ft.-lbs./in. |
| Impact Strength Rating | Good |
| Tensile Strength | 9,000 psi |
| Tensile Strength Rating | Good |
| Specifications Met | ASTM D6100, Made of FDA Listed Material, NSF/ANSI Standard 51 for Food Contact, NSF/ANSI Standard 61 for Drinking Water |
| Density | 0.051 lbs./cu. in. |
| Coefficient of Friction | 0.20 |
| Dielectric Strength | 435 V/mil |

| | |
|----------------------------------|---------------------------------|
| Water Absorption | 0.30% |
| Coefficient of Thermal Expansion | 8.5×10^{-5} in./in./°F |
| RoHS | Compliant |

These sheets, bars, and strips are made of Delrin® acetal resin, a wear-resistant material with a naturally slippery surface. Also known as acetal homopolymer, it resists moisture and has the ability to hold tight tolerances. It's often used for gears, bushings, and bearings.



| | | | |
|------------------|---------------|---|------------------------|
| DESIGN # | DRAWN BY # | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED CP | APPROVED # | DRAWING NO. M-DELRIN-B | REV. A SHEET 1 OF 1 |
| DATE 02.04.30 | | TITLE DELRIN BAR | SCALE NTS |
| A | 02.04.30 | NEW ISSUE | |
| A1 | 02.06.04 | ADD "ACETRON GP ACETAL" AS OPTION | |

PURCHASE MATERIAL:

DELRIN II ISOE OR ACETRON GP ACETAL

PART NUMBER:

M-DELRIN-B | T.TTT | x | WW.WWW |
THICK | WIDTH |
WHERE T.TTT = THICKNESS (IN INCHES)
WW.WWW = WIDTH (IN INCHES)

EG. 0.5" x 1.0" BAR = M-DELRIN-B0.500 x 01.000

RELEASED
02.06.04

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MDLRW 1.500x3.000 W
 DATE: 19/01/14

PO / BATCH NO.: P0042203/S144322

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 4ft
 QUANTITY INSPECTED: 4ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500"
 THICKNESS RECEIVED: 1.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

| DESCRIPTION | NCR (Check Y/N) | | COMMENTS |
|---|-------------------------------------|-------------------------------------|----------|
| SURFACE DAMAGE | Y | <input checked="" type="checkbox"/> | |
| CORRECT FINISH | <input checked="" type="checkbox"/> | N | |
| CORROSION | Y | <input checked="" type="checkbox"/> | |
| CORRECT GRAIN DIRECTION | <input checked="" type="checkbox"/> | N | |
| CORRECT MATERIAL PER M-DRAWING | <input checked="" type="checkbox"/> | N | DELRIN |
| CORRECT THICKNESS | <input checked="" type="checkbox"/> | N | |
| PHOTO REQUIRED | Y | <input checked="" type="checkbox"/> | |
| CORRECT REF # TO LINK CERT | <input checked="" type="checkbox"/> | N | P0042203 |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="checkbox"/> | N | |
| CORRECT M# ON THE MATERIAL | <input checked="" type="checkbox"/> | N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y | <input checked="" type="checkbox"/> | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y | <input checked="" type="checkbox"/> | |

| CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL | | | | | |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

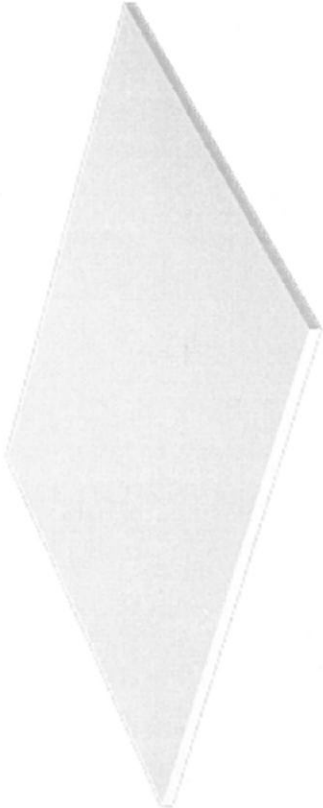
| | |
|--|-------------------------------------|
| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
| INSPECTED BY: <u>DAS 61</u> DATE: <u>19/01/14</u> | SIGNED OFF BY: _____ DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

Nylon Sheet

Off-White, 24" x 24" x 1/4"

\$79.70 Each
8539K95



| | |
|-------------------------|---|
| Material | Nylon Plastic |
| Grade | 6/6 |
| Cross Section Shape | Rectangle |
| Construction | Solid |
| Texture | Smooth |
| Color | Off-White |
| Clarity | Opaque |
| Thickness | 1/4" |
| Thickness Tolerance | 0.000" to +0.025" |
| Tolerance Rating | Oversized |
| Width | 24" |
| Width Tolerance | 0" to +1/2" |
| Length | 24" |
| Length Tolerance | 0" to +1/2" |
| Backing Type | Plain |
| Hardness | Rockwell R110 |
| Hardness Rating | Hard |
| For Use Outdoors | No |
| Temperature Range | -40° to 185° F |
| Impact Strength | 1.00 ft.-lbs./in. |
| Impact Strength Rating | Good |
| Tensile Strength | 11,200 psi |
| Tensile Strength Rating | Excellent |
| Specifications Met | ASTM D5989, ASTM D6779, Made of FDA Listed Material, NSF/ANSI Standard 61 for Drinking Water, UL 94V2 |
| Density | 0.041 lbs./cu. in. |

| | |
|----------------------------------|---------------------------------|
| Coefficient of Friction | 0.27 |
| Dielectric Strength | 300V/mil |
| Water Absorption | 1.35% |
| Coefficient of Thermal Expansion | 4.8×10^{-5} in./in./°F |
| RoHS | Compliant |

With excellent wear and abrasion resistance, these nylon 6/6 sheets, bars, and strips are often used for bearings, gears, and other high-wear parts. They resist gasoline, mineral oil, and refrigerants.

8 7 6 5 4 3 2 1

| REV. | DESCRIPTION | DATE | BY | APPROVED |
|------|-------------|----------|----|----------|
| A | NEW ISSUE | 17.08.23 | VM | WM |

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

SPECIFICATION:

PART NUMBER:

NYLON 6 BAR

ASTM D5989

MT-NYLON 6-B[H.HHH][W.WWW]-C

WHERE "H.HHH" = HEIGHT IN INCHES

WHERE "W.WWW" = WIDTH IN INCHES

WHERE "C" = COLOR [W= WHITE] / [B= BLACK]

EG. 1/4" x 2" WHITE BAR = MT-NYLON 6-B0.250x2.000-W

TOLERANCES PER MANUFACTURER SPECIFICATIONS



NYLON 6 BAR

| DESIGN BY: | VM 8/9/2017 | DATE: | 9/7/2017 | SCALE: | NTS | WEIGHT: | N/A | SHEET: | 1 OF 1 |
|---|----------------|----------|---------------|------------|---------------|----------|---------------|--------|----------|
| DRAWN BY: | SAC 09/07/2017 | CHECKED: | VM 09/07/2017 | MTG. APPR: | DP 09/07/2017 | QA APPR: | VM 09/12/2017 | DATE: | 9/7/2017 |
| 1. DIMENSIONS ARE IN INCHES 2. UNLESS OTHERWISE SPECIFIED 3. DIMENSIONS ARE TO CENTER UNLESS NOTED OTHERWISE 4. ALL DIMENSIONS ARE TO BE HONED UNLESS NOTED OTHERWISE 5. DIMENSIONS ARE TO BE HONED UNLESS NOTED OTHERWISE 6. DIMENSIONS ARE TO BE HONED UNLESS NOTED OTHERWISE 7. DIMENSIONS ARE TO BE HONED UNLESS NOTED OTHERWISE 8. DIMENSIONS ARE TO BE HONED UNLESS NOTED OTHERWISE 9. DIMENSIONS ARE TO BE HONED UNLESS NOTED OTHERWISE 10. DIMENSIONS ARE TO BE HONED UNLESS NOTED OTHERWISE | | | | | | | | | |

ECN 17-649

8 7 6 5 4 3 2 1

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-NYLON 6-60.250x2.000-W

PO / BATCH NO.: P0042203 / S144320

DATE: 19/01/14

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.250"

QUANTITY RECEIVED: 25F

THICKNESS RECEIVED: 0.250"

QUANTITY INSPECTED: 25F

SHEET SIZE ORDERED: 2'x2'

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: 2'x2'

| DESCRIPTION | NCR (Check Y/N) | | COMMENTS |
|--|------------------------------------|------------------------------------|-----------------|
| SURFACE DAMAGE | Y | <input checked="" type="radio"/> N | |
| CORRECT FINISH | <input checked="" type="radio"/> Y | N | |
| CORROSION | Y | <input checked="" type="radio"/> N | |
| CORRECT GRAIN DIRECTION | <input checked="" type="radio"/> Y | N | |
| CORRECT MATERIAL PER M-DRAWING | <input checked="" type="radio"/> Y | N | <u>NYLON</u> |
| CORRECT THICKNESS | <input checked="" type="radio"/> Y | N | |
| PHOTO REQUIRED | Y | <input checked="" type="radio"/> N | |
| CORRECT REF # TO LINK CERT | <input checked="" type="radio"/> Y | N | <u>P0042203</u> |
| CORRECT MATERIAL IDENTIFICATION | <input checked="" type="radio"/> Y | N | |
| CORRECT M# ON THE MATERIAL | <input checked="" type="radio"/> Y | N | |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y | <input checked="" type="radio"/> N | |
| DOES THIS REQUIRE AN EXTRUSION REPORT | Y | <input checked="" type="radio"/> N | |

| CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW | | | | | |
|--|-----|-----|-------|-------|---------|
| TYPE OF MATERIAL | HRC | HRB | DUR A | DUR D | WEBSTER |
| SIZE OF TEST SAMPLE | | | | | |
| HARDNESS / DUROMETER READING | | | | | |

testers located in the Quality Office

| | |
|--|--|
| QC 18 INSPECTION | ENGINEERING SIGNOFF (if required) |
| INSPECTED BY: <u>61</u> DATE: <u>19/01/14</u> | SIGNED OFF BY: _____ DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in